APR 2 6 1979

Item 782-B

TC1.26/2:1-6-4

SUMMARY OF TRADE AND TARIFF INFORMATION

COMPLETED

Prepared in Terms of the Tariff Schedules of the United States

ORIGINAL

LIVE PLANTS

TSUSA item 125.3090; TSUS items 125.40, 125.50, 125.51, 125.60, 125.65, 125.67, 125.70, and 125.80

USITC PUBLICATION 841
CONTROL NO. 1-6-4
NOVEMBER 1978

United States International Trade Commission / Washington, D.C. 20436

I

(49)

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Joseph O. Parker, Chairman
Bill Alberger, Vice Chairman
George M. Moore
Catherine Bedell
Paula Stern

Kenneth R. Mason, Secretary to the Commission

This report was prepared principally by

Stephen D. Burket

Agriculture, Fisheries, and Forest Products Division

Office of Industries
Norris A. Lynch, Director

Address all communications to
Office of the Secretary
United States International Trade Commission
Washington, D.C. 20436

II

NEWS

UNITED STATES INTERNATIONAL TRADE COMMISSION • Office of the Secretary • Washington, D.C. 20436

FOR RELEASE AT WILL
November 28, 1978

CONTACT: Stephen Burket
(202) 523-0033

U.S. INTERNATIONAL TRADE COMMISSION RELEASES A SUMMARY ON LIVE PLANTS AS ONE OF A SERIES OF SUMMARIES OF TRADE AND TARIFF INFORMATION

Information on U.S. imports, exports, and production and on world trade in live plants became available today as the United States International Trade Commission released another report in its in-depth series of summaries of trade and tariff information initiated last year.

The summaries of trade and tariff information are designed to meet the needs of wide and varied interests, including the Congress, the courts, Government agencies, importers, domestic producers, research organizations, and many others. The summaries contain accurate descriptions, in terms of the tariff schedules, of the thousands of products imported into the United States, and information on their methods of production, world supplies, and importance in trade and in the U.S. economy. The summaries also include substantive analytical material with regard to the basic factors affecting trends in consumption, production, and trade, and factors bearing on the competitive position and economic health of domestic industries.

-More-

III

U.S. INTERNATIONAL TRADE COMMISSION RELEASES A SUMMARY ON LIVE PLANTS AS ONE OF A SERIES OF SUMMARIES OF TRADE AND TARIFF INFORMATION

This report is being distributed to various Government agencies, congressional committees, and interested members of the public. In addition, as a service to the public, the field offices of the Department of Commerce and selected public and university libraries in large cities will be supplied with copies for commercial and professional consultation. Copies of the report (USITC Publication 841, Control No. 1-6-4) can be obtained by calling (202) 523-5178 or from the Office of the Secretary, 701 E St. NW., Washington, D.C. 20436.

UNITED STATES INTERNATIONAL TRADE COMMISSION

SUMMARY OF TRADE AND TARIFF INFORMATION

Prepared in Terms of the

Tariff Schedules of the United States

Live Plants

TSUSA item 125.3090; TSUS items 125.40, 125.50, 125.51, 125.60, 125.65, 125.67, 125.70, and 125.80

USITC PUBLICATION 841

CONTROL NO. 1-6-4

NOVEMBER

V

Tariff Schedules of the United States

Schedule 1 – Animal and Vegetable Products

Schedule 2 – Wood and Paper; Printed Matter

Schedule 3 – Textile Fibers and Textile Products

Schedule 4 – Chemicals and Related Products

Schedule 5 – Nonmetallic Minerals and Products

Schedule 6 – Metals and Metal Products

Schedule 7 – Specified Products; Miscellaneous and Nonenumerated Products

Schedule 8 – Special Classification Provisions

FOREWORD

Each Summary of Trade and Tariff Information is part of a series published periodically by the United States International Trade Commission to provide information on conditions of competition between domestic and foreign products. It includes data on trade and development on U.S. industries. This report, covering the period 1973 through 1977, represents one of many being published in the current series of summaries.

This series provides comprehensive coverage of product uses, manufacturing processes, and commercial practices, and provides analysis of the numerous factors affecting U.S. and world trade in each commodity area. The summaries are cast in terms of the eight schedules of the Tariff Schedules of the United States (TSUS).

The current series will consist of approximately 1,000 individual reports published in looseleaf form, which will enable the Commission to issue updated pages as appropriate for individual summaries. The overall program will run several years, ultimately covering all items of the TSUS.

CONTENTS

	Page
Executive summary	vii
Description and uses	1
General	1
Live plants, n.s.p.f.	1
Herbaceous perennials	2
Other live plants:	
Fruit-tree stocks, fruit trees, and fruit plants	2
Rose stocks and rose plants	3
Seed potato eves	3
Orchid plants	3
U.S. Customs treatment:	
Tariff history	3
Possible nontariff barriers	5
The domestic market:	
The domestic consumer and product demand	6
U.S. consumption	7
U.S. prices	7
U.S. production:	
The domestic market	8
Employment	9
Foreign affiliations	10
Production levels and trends	10
Inventories	11
Marketing and pricing of U.S. production	11
U.S. exports:	
Export levels and trends	13
The foreign market	13
U.S. imports:	
Import levels and trends	14
Leading suppliers of U.S. imports:	
Live plants, n.s.p.f	15
Other live plants	15
Import impact	15
Importers	16
World trade	16
Appendix A. Excerpts from the Tariff Schedules of the United States Annotated	17
Appendix B. Statistical tables	19

Figure

Principal distribution channels for marketing live plants in the United States	12

CONTENTS

Tables

1. Live plants: U.S. rates of duty, by TSUS(A) items, Aug. 31, 1963, to present---------- 20
2. Live plants: Value of U.S. production, imports, exports, and apparent consumption, 1973-77---------- 22
3. Live plants: U.S. producers, producers' sales, and percentage distribution of producers and their sales, by types and by major producing States, 1977---------- 23
4. Live plants: U.S. wholesale value of production, by specified categories, 1973-77---------- 24
5. Foliage plants: Sales, by selected States, 1973-77---------- 25
6. Potted chrysanthemums: Sales, by selected States, 1973-77---------- 26
7. Potted geraniums, hydrangeas, lilies, poinsettias, flowering and foliar bedding plants, and vegetable bedding plants: U.S. growers' sales, 1976 and 1977---------- 27
8. Live plants: U.S. exports of domestic merchandise, by selected markets, 1973-77---------- 28
9. Live plants: U.S. imports for consumption, by TSUS or TSUSA items, 1973-77---------- 29
10. Live plants, n.s.p.f. (TSUS item 125.80): U.S. imports for consumption, by specified sources, 1973-77---------- 30
11. Fruit tree seedlings, layers, and cuttings (TSUS item 125.40): U.S. imports for consumption, by principal sources, 1973-77---------- 31
12. Fruit trees, grafted or budded, and cuttings and seedlings of fruit plants (TSUS item 125.50): U.S. imports for consumption, by principal sources, 1973-77---------- 32
13. Seedlings and cuttings of rose stock (TSUS item 125.60): U.S. imports for consumption, by principal sources, 1973-77---------- 33
14. Rose plants, budded, grafted, or grown on their own roots (TSUS item 125.65): U.S. imports for consumption, by principal sources, 1973-77---------- 34
15. Seed-potato eyes (TSUS item 125.67): U.S. imports for consumption, by principal sources, 1973-77---------- 35
16. Orchid plants (TSUS item 125.70): U.S. imports for consumption, by principal sources, 1973-77---------- 36

Executive Summary

This summary of trade and tariff information covers most live plants having commercial value. The group includes live plants specifically mentioned in the Tariff Schedules--herbaceous perennials, rose stocks and rose plants, fruit and nut trees and fruit plants, orchid plants, and seed potato eyes--as well as those not specially provided for, consisting primarily of ornamental nursery plants and foliage plants. In the United States, live plants are sold primarily through retail and mass market outlets for use in indoor home, office, and shopping plaza landscape displays, and in outdoor landscape situations. Retail sales, which are in a long-term rising trend, totaled more than $5.6 billion in 1977.

Live plants are grown throughout the United States. However, California and Florida account for a significant portion of the production of live plants. In 1977 there were probably fewer than 10,000 commercial growers of live plants in the United States. Most growers produce more than one type of horticultural product, yet a significant part of the production of any one kind of plant is often grown by less than 10 percent of the growers. For example, in 1975, of firms producing potted chrysanthemums, 9 percent accounted for over 60 percent of the production in that industry.

From 1973 to 1977, the value of U.S. production increased from $1.1 billion to $1.9 billion. U.S. production accounts for almost 99 percent of U.S. consumption. Interest in ecology, increased awareness of plants, more people in apartments with little access to growing plants outdoors, and increased availability of plants have contributed to the increase in consumer demand for live plants.

The United States is a net importer of live plants, but the kind of plants imported are not generally of the same types that are exported. U.S. imports of live plants were valued at $21.5 million in 1977, up sharply from $5.9 million in 1973. Most imports are of rooted and unrooted cuttings of foliage plants from Guatemala, Jamaica, and Honduras. U.S. live plant exports were valued at $18 million in 1977; about three-quarters of such exports went to Canada.

Description and Uses

Commodity	TSUS(A) item
Herbaceous perennials	125.3090
Fruit-tree seedlings, layers, and cuttings	125.40
Grafted or budded fruit trees, and cuttings and seedlings of fruit plants (except trees)	125.50
Pineapple slips produced in Cuba	125.51
Rose stocks	125.60
Rose plants	125.65
Seed potato eyes	125.67
Orchid plants	125.70
Live plants, not specially provided for	125.80

Note.—For the statutory description, see excerpt from the Tariff Schedules of the United States Annotated (1978) (TSUSA) in app. A.

General

This summary includes most live plants, as indicated above; it does not cover bulbs, roots, rootstocks, clumps, corms, tubers, and rhizomes used for propagating plants or used as vegetables (e.g. potatoes, onions, and garlic). The term live plants, as herein used, refers collectively to the plant material covered by this summary.

The bulk of the live plants here considered are used in or around the home. However, substantial quantities are also used in the commercial production of various horticultural crops, such as fresh cut flowers, vegetable and fruit plants for wholesale trade, and potted flower and foliage plants.

Live plants, not specially provided for (n.s.p.f.), are by far the most commercially important of the items here considered, followed by herbaceous perennials, a distant second. This holds true for both domestic production and imports.

Live plants, n.s.p.f.

This item consists mostly of woody ornamental plants that are sold by nurserymen for use in landscaping. It also includes most vegetable and ornamental bedding plants, most potted foliage plants and cuttings of foliage plants, and some potted flowering plants. It includes all woody plants (except rose plants and fruit trees and fruit plants) and all annual plants.

There are over 50 genera of foliage plants in commercial use. 1/ Foliage plants are used extensively in indoor home, office, and shopping plaza landscape situations, and they are used for terrariums, home planters, hanging baskets, and individual pot specimens. Most foliage plants are produced from cuttings taken from stock plants.

Trees and shrubs are being used in increasing numbers by homeowners, municipalities, and highway authorities. It is estimated that there are over 100 million shade and ornamental trees in the United States, covering some 1,200 species and varieties. Ornamental trees and shrubs are generally propagated from seed.

Potted flowering plants are generally vegetatively propagated. They are used in indoor home, office, and shopping plaza landscape situations, and in outdoor landscape situations. There are some 30 species and varieties of commercial importance. Most of these are grown only on a seasonal basis.

Herbaceous perennials

Herbaceous perennials (perennial plants of which the above-ground portion dies after a season's growth) are a broad classification of plant material including grass sod, potted chrysanthemums, and geraniums. They are used in the home, in landscaping, and in the commercial production of certain potted plants and the like.

Other live plants

Fruit-tree stocks, fruit trees, and fruit plants.--Most fruit trees are propagated by budding or grafting the buds or scions (cuttings prepared for grafting) of desired varieties upon an understock (the portion of the plant upon which a graft is made). This method of propagation is necessary because fruit tree seeds normally do not produce plants having the same characteristics as the parent plant. The understock may be a seedling, a rooted cutting, or a layer (a portion of a plant which has been rooted while attached to the parent plant). In the commercial propagation of fruit trees, seedlings 1 or 2 years old are most commonly used for the understocks.

1/ Genus (genera), species, and variety are terms used in the biological classification of plants and animals. Genus is a term which refers to a group of structurally or phytogenetically related species, or an isolated species exhibiting unusual differentiation. Species refers to a group of plants which possess in common one or more distinctive characters, and do or may interbreed. Variety refers to a group of plants related by descent, but distinguished from other similar groups only by characters considered too inconstant or too trivial to entitle it to recognition as a species.

Fruit plants, other than trees, are propagated commercially by means of seedlings, cuttings, and layers. The principal fruit plants of commercial importance are strawberry, grape, blueberry, blackberry, raspberry, and currant.

Rose stocks and rose plants.--Rose plants are sold to commercial rose growers for cut flower production and to home gardeners and others for growing ornamental rose bushes. Almost all rose bushes are propagated from buddings and, to a lesser extent, from the grafting of improved rose varieties onto roots of unimproved roses such as manetti and multiflora, which have disease resistance and other desirable characteristics. These unimproved plants to which the improved varieties are budded or grafted are called stocks. Manetti is used primarily as stock for greenhouse roses, while multiflora and rugosa are used as stocks for roses for outdoor planting. Much of the production of rose stocks is on the same farms where the budding and grafting are done to produce the plants, but there is also some production of rose stocks for sale as such.

Seed potato eyes.--Seed potato eyes, which hereafter in this summary are referred to as seed potato pieces, consist of pieces cut from seed potatoes; typically each piece weighs about 1-1/2 to 2 ounces and includes one or more buds (eyes). The seed potato pieces are used for propagation. Most of the potatoes used for seed purposes are shipped whole. The larger of these potatoes are then cut into pieces on the farm before planting.

Orchid plants.--Orchid plants are used primarily by floral greenhouse growers for the commercial production of cut flowers. These commercial growers produce a major part of their own plants by division of existing plants, and rely on purchased plants mainly for upgrading their plants with new varieties and hybrids. A large market for orchid plants (primarily of the genera Cattleya, Phalaenopsis, Paphiopedilium, and Cymbidium) is with hobbyists for use as potted plants in home greenhouses. Orchid plants for the commercial production of cut flowers are largely limited to the genera Cattleya and Cymbidium. Part of the production, particularly of plants for commercial production of cut flowers, is in the form of meristem plants--small plants about one-half inch high, developed microscopically from the growing tip or meristem tissue of a particular hybrid for fast reproduction of plants with identical characteristics.

U.S. Customs Treatment

Tariff history

Live plants discussed in this summary are classified for tariff purposes under TSUS items 125.30(pt.)-125.80. The rates of duty currently applicable to imports of such articles are shown below:

TSUS(A) item No.	Commodity	Rate of duty		GSP-eligible article
		Col. 1	Col. 2	
	Bulbs, roots, rootstocks, clumps, corms, tubers, and herbaceous perennials:			
	Other, imported for horticultural purposes:			
125.3090	Other	5.5% ad val.	30% ad val.	Yes
125.40	Seedlings, layers, and cuttings of apple, cherry, pear, plum, quince, and other fruit-tree stocks.	Free	$2 per 1,000	No
125.50	Grafted or budded fruit trees, cuttings, and seedlings of grape, currant, gooseberry, or other fruit plants (except trees).	5% ad val.	25% ad val.	Yes
125.51	Pineapples slips produced in Cuba.	Free 1/		
125.60	Seedlings and cuttings of Manetti, multiflora, brier, rugosa, and other rose stock.	15c per 1,000	$2 per 1,000	No
125.65	Rose plants, budded, grafted, or grown on their own roots.	1c each	4c each	No
125.67	Seed potato eyes	5% ad val.	20% ad val.	No
125.70	Orchid plants	4% ad val.	25% ad val.	Yes
125.80	Live plants, suitable for planting, not specially provided for.	7.5% ad val.	25% ad val.	Yes

1/ Suspended.

During the Kennedy round of the General Agreement on Tariffs and Trade, duty reductions in column 1 of between 25 and 100 percent were granted on TSUS items 125.40, .50, and .60-.80 (table 1, app. B). 1/ No concession was granted on TSUS item 125.30.

1/ The column 1 rate of duty applies to imports from all countries except those countries or areas designated as being under Communist domination or control, imports from which are subject to the column 2 rate.

BEST DOCUMENT AVAILABLE

The ad valorem equivalents (AVE) of the rates of duty in column 1 for TSUS items 125.60 and 125.65 are shown below for 1973-77 (in percent):

Item	1973	1974	1975	1976	1977
125.60	0.4	0.2	0.1	1/	0.1
125.65	.9	.8	.6	2.6	1.7

1/ Less than 0.05 percent.

The AVE rates of duty for these items are low owing to the high unit values of imports during 1973-77. However, over the period the unit values of imports varied widely as a result of the many different kinds of articles imported from various sources.

Articles covered by TSUS items 125.30, .50, .70, and .80 are eligible for duty-free treatment under the Generalized System of Preferences (GSP). The GSP, which became effective on January 1, 1976, was established pursuant to the provisions of title V of the Trade Act of 1974. Under the provisions of the GSP, eligible articles imported from beneficiary developing countries are admitted duty free into the United States. The granting of GSP has had little effect on U.S. trading patterns for eligible live plants. Many of the designated beneficiary countries were the principal U.S. suppliers of live plants before they were granted GSP status because most U.S. imports consist of propagating materials that are readily available from natural sources in these countries.

Possible nontariff barriers

Imports of all vegetative plant material into the United States are subject to quarantine inspections to prevent the introduction of injurious plant diseases and insect pests. In addition, a permit that is readily obtainable from the Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture is required in advance for importation of all vegetative plant material. Inspections are made quickly and result in very few detentions. In 1977, approximately 5 percent of the imports were required to be treated under the plant inspection and quarantine programs before they could be entered, and less than 0.05 percent of the potential imports were refused entry. Imports may also be subject to post-entry quarantine (supervised growing and inspection).

Imports of citrus vegetative materials are prohibited under the citrus quarantine (7 CFR 319.19). The quarantine regulating nursery vegetative material (7 CFR 319.37) prohibits imports of over 50 genera from specified countries and also prohibits, from all countries except Canada, fruit and nut

stocks produced from seed. All stone fruit, apple, and pear plant material, including that from Canada, must have been grown in specified nurseries designated in the plant quarantine regulations. All other allowable woody fruit plant material, except that from Canada, must be grown in postentry quarantine until it is released by the APHIS. With the exception of Canadian products, woody nursery and fruit plants must be young and small, and nursery, fruit, and bedding plants and other herbaceous perennials must be free from soil and be subjected to fumigation and other treatment as deemed necessary.

Imports of potatoes (including seed potato pieces) enter without quarantine restriction from most parts of Canada and Bermuda. Imports from other countries are subject to advance permit and foreign certification of inspection as to freedom from injurious diseases and plant pests (7 CFR 321). 1/

Imports of rose stocks or plants from Australia, Italy, New Zealand, and the Republic of South Africa are prohibited in order to prevent the introduction into the United States of a rose wilt virus present in those countries. Rose stocks or plants from other countries require an import permit, inspection, and fumigation, if deemed necessary. Material from all countries except Canada must enter free from soil and must be grown under postentry quarantine until judged free of injurious plant diseases.

Quarantine inspections are provided free of charge to importers during normal working hours by the APHIS. At all other times importers are charged a fee for inspection services. Any treatment that is required under the plant inspection and quarantine programs must be paid for by the importer.

The Domestic Market

The domestic consumer and product demand

The ultimate consumption of most live plants is in the home (for interior decoration) or around the home (for landscaping), although live plants move through various production and marketing channels before they reach the consumer.

The demand for live plants has changed from primarily "necessity" (traditional) purchases to discretionary purchases. Traditional purchases have generally consisted of woody ornamental plants for use in landscaping. Prior to the late 1960's, the demand for live plants was thought to be tied to residential construction and commercial horticultural production (fruits and vegetables). However, in the late 1960's, consumer preferences changed toward discretionary purchases of live plants. The ecology movement, more people living in apartments with little access to growing plants outdoors, increased

1/ Imports of certified seed potatoes and other white potatoes (not covered by this summary) are subject to tariff-rate quotas; see TSUS items 137.20-.29.

awareness of plants, and increased availability of plants have all contributed to the increase in consumer interest in live plants. Retail sales of live plants are estimated to have increased from $3 billion in 1973 to $5.6 billion in 1977.

U.S. consumption

The wholesale value of U.S. consumption of all live plants increased from $1.1 billion in 1973 to $1.9 billion in 1977 (table 2). Domestic production supplies almost all of consumption; imports and exports have each been equivalent to about 1 percent of the value of consumption in recent years. In 1976, imports of live plants, n.s.p.f., and herbaceous perennials accounted for 1.2 and 1.5 percent, respectively, of U.S. consumption of such plant material.

Mass marketing, lower prices, increased interest in ecology, and improvements in transportation and production methods, resulting in an improved quality of plants being available to the consumer, should encourage continued growth in the demand for live plants.

U.S. prices

Industry sources indicate that there was a steady increase in price during 1973-77 for most types of live plants except for foliage plants (which are a part of the category "live plants, n.s.p.f."). Foliage plants account for almost 20 percent of the value of U.S. production of live plants, n.s.p.f. The prices for foliage plants gradually increased during 1973-76, but since early 1977, prices for most types of foliage plants have remained steady or declined as the foliage plant market became saturated. Data on U.S. prices for most types of live plants are not available.

The following tabulation shows the average wholesale price received by U.S. potted chrysanthemum growers for 1973-77, as reported by the U.S. Department of Agriculture:

	Wholesale price per pot
1973	$1.66
1974	1.77
1975	1.94
1976	2.07
1977	1.95

Potted chrysanthemums (a herbaceous perennial) are the most important potted flowering plant produced in the United States, accounting for 25 percent of

the value of U.S. production of herbaceous perennials. Although the data can not be extrapolated to include all live plants, it does give an indication of the magnitude of the price increases during 1973-77.

Data are not available to compare prices of domestic and imported live plants of comparable types and grades. In general, most of the imported live plants (primarily rooted and unrooted cuttings of foliage plants) are purchased and further grown by U.S. growers before being sold to the consumer.

U.S. Production

The domestic market

It is estimated that somewhat less than 10,000 farms, greenhouses, and nurseries produced live plants in 1977. The number of producers probably increased during the 1970's, although exact figures are not available. However, published information available on various segments of the live plant industry reveals that the number of greenhouses producing foliage plants for indoor or patio use increased from 681 in 1973 to 1,725 in 1977. 1/ This reflects the rapid growth in the foliage plant industry during the 1970's.

According to industry sources, the number of commercial nurseries producing ornamental plants (live plants, n.s.p.f.) remained constant at about 5,000 during 1973-77. Although production increased over this period, the expanded production resulted from acreage increases by existing firms.

The number of farms producing sod (a herbaceous perennial) in the United States has increased from about 800 in 1973 to 1,200 in 1977. Sod production increased steadily over the last decade, paralleling the growth in the U.S. construction industry and the increased use of landscaping.

U.S. live plant production is highly concentrated geographically by plant types. California, with 1.5 percent (36) of the vegetable bedding plant (live plants, n.s.p.f.) producers, accounted for over 18 percent ($5.8 million) of the vegetable bedding plant sales in 1977 (table 3). Florida is also a focal point for live plant production. In 1977, Florida housed 21 percent (378) of the foliage plant producers, accounting for 44 percent ($120 million) of U.S. production. Favorable climates in California and Florida account for their leading positions. Other important producing areas are Texas and those States surrounding major population centers in the Northeast and Midwest.

The U.S. industry is further concentrated by firm size. In 1975, the last year data are available (it is assumed that the same condition exists today), 13 percent of the foliage plant growers accounted for about one-half of the area devoted to foliage plants, and 9 percent of the potted chrysanthemum growers accounted for nearly two-thirds of the pots sold. The U.S nursery

1/ These data are based on the number of greenhouses in the 14 States that accounted for 95 percent of all foliage plants marketed in those States surveyed by the USDA in 1976.

industry is also highly concentrated in terms of size; it is estimated that less than 2 percent of the nurseries in 1975 accounted for more than one-fourth of the wholesale sales in that industry.

Employment.--Employment in the live plant industry is estimated at about 140,000 full-time workers; during the seasonal peaks employment may approach 300,000 workers. Nursery growers of live plants for the wholesale market account for nearly one-half of the live plant production covered by this summary. Data compiled by the Horticultural Research Institute, Inc. (HRI), indicate that in 1975 about 5,000 wholesale nursery growers employed approximately 70,000 people the year round and more than double that number (149,000) during the seasonal peak periods.

The following tabulation shows average basic year-round employment and peak season employment for wholesale nursery growers by company size ranges (based on annual sales), in 1975:

Size of company	Average number of workers	
	Basic	Peak
$25,000 to $99,000	6.7	20.0
$100,000 to $299,999	15.8	26.7
$300,000 to $499,999	23.9	52.7
$500,000 to $999,999	42.1	80.6
$1,000,000 and over	123.9	227.9

Small growers triple the number of their employees during the peak period, compared with larger growers, who nearly double their employment. It is believed that the same general trend in employment for wholesale nursery growers is characteristic of other segments of the live plant industry.

The live plant industry is characterized by high labor costs in relation to value of sales. Data compiled by HRI indicated that labor costs for the wholesale nursery industry in 1975 were equivalent to 37.5 percent of sales. The following tabulation shows the average payroll and such payroll as a percent of average sales by company size ranges (based on annual sales) for 1975, as compiled by HRI:

Size of company	Average payroll	Ratio of average payroll to average sales (percent)
$25,000 to $99,000	$24,767	43.3
$100,000 to $299,999	72,673	39.8
$300,000 to $499,999	144,445	38.7
$500,000 to $999,999	262,690	38.2
$1,000,000 and over	994,108	36.4
Average	225,226	37.5

Several factors could account for the fact that labor costs decrease as company size increases: (1) large firms are able to retain a larger portion of their work force the year round than small firms, which could increase labor productivity, and (2) larger firms can mechanize and automate certain functions that increase labor productivity. Other economies of size may also contribute to reducing labor cost as a percent of sales.

Foreign affiliations.--A large part of the imports of live plants (primarily cuttings of foliage plants) are shipments to U.S. firms from their affiliates in the Caribbean and South America. 1/ Most of the production of these firms is for use in their own U.S. growing operations. Several firms also sell part of their production to other growers in the United States and to other foreign markets. Other international firms produce strictly for sale to other growers and do not have U.S. growing operations.

Production levels and trends

The estimated wholesale value of all U.S. live plant production has increased every year since 1973. In 1977, the wholesale value of U.S. production was $1.9 billion, more than 70 percent greater than in 1973 (table 4).

Categorized in terms of the nomenclature of the TSUS, domestic production of live plants can only be broadly estimated. About 75 percent of domestic production in 1976 would have been classified under TSUS item 125.80, the category for live plants, n.s.p.f. About 12 percent of the total would have been herbaceous perennials (including sod), classified under TSUSA item 125.3090. About 6 percent would have been classified as fruit and nut trees and stocks and fruit plants under TSUS items 125.40 and 125.50. The remaining 7 percent consists of rose stocks and plants, orchid plants, and seed potato eyes (TSUS items 125.60, 125.65, 125.67, and 125.70).

Annual data for 1973-77 are available on U.S. production of foliage plants and potted chrysanthemums. The U.S. foliage plant industry has grown steadily from $68 million in 1973 to approximately $272 million in 1977 (table 5). 2/ In 1977, production in Florida and California accounted for 70 percent of the total, approximately the same share as the two States held in 1973. During 1973-77, U.S. potted chrysanthemum production increased from $34 million to over $55 million (table 6). California and Florida accounted for over 30 percent of the production in 1977.

1/ It is believed that about 12 of the more than 40 firms producing foliage plant cuttings in the Caribbean area and South America are financially affiliated with U.S. firms.

2/ The data for 1973-75 covered production in 23 States; that for 1976 covered production in the 14 States that accounted for at least 95 percent of the production in the 23 States covered in 1975. The production in 1977 is based on 16 States, including the 14 States covered in 1976.

Production data are available for potted geraniums, hydrangeas, lilies, poinsettias, and flowering and foliar bedding plants and vegetable bedding plants for 1976 and 1977 (table 7). The value of production increased for all types of the above material except for potted geraniums, which declined. Decreased production in the Northeast was primarily responsible for the decline in geranium production.

U.S. production of certain live plants is seasonal. Production of sod, woody ornamentals, flowering and foliar and vegetable bedding plants, fruit and nut trees, and small fruit plants is scheduled to meet the spring demand for these products. Green foliage plant production is scheduled for the late fall, winter, and early spring to meet consumer demand for greenery after frost has killed most outdoor plants. Production seasons for flowering plants vary depending on plant type. Potted poinsettias are produced for sale within a very short period before Christmas; similarly, potted Easter lilies are scheduled for sale shortly before Easter. Potted geraniums and hydrangeas are produced for spring sale.

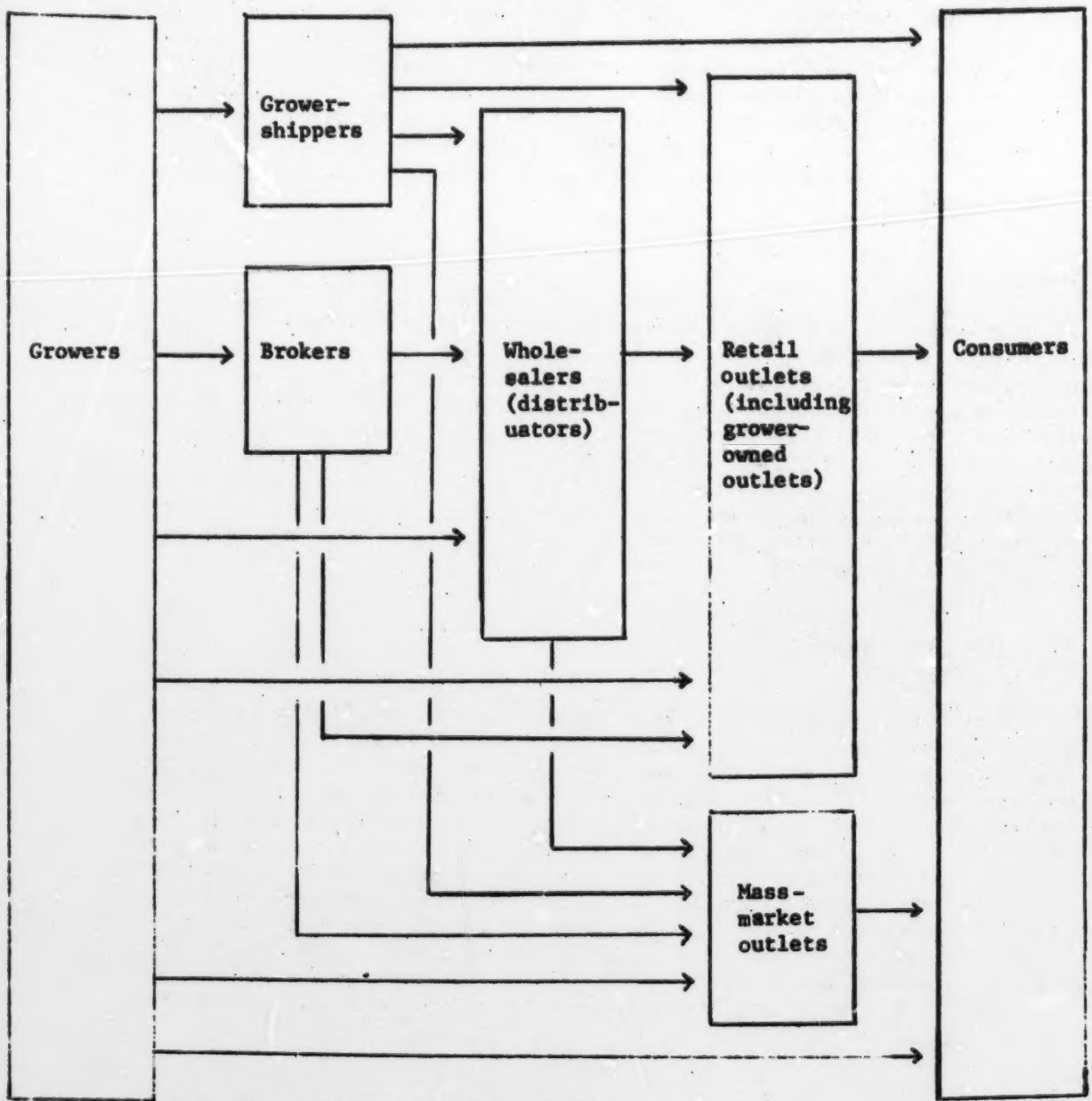
Inventories

Producers of live plants generally try to minimize inventories owing to the limited amount of growing space available in most nurseries and greenhouses. For short periods of time, inventories may increase; however, this can result in overcrowding and reduced plant quality. Also, since most live plant production is aimed for sale in a given demand period (e.g., Christmas and Easter), the accumulation of inventories could mean carrying the material in inventory for nearly a year. Hence, most live-plant producers may sell excess supplies at drastically reduced prices to eliminate inventory buildup or, if necessary, they may "dump" or dispose of the material as waste or for use in composting.

Marketing and pricing of U.S. production

Most U.S. live plants are sold through retail (retail florist shops, garden centers, and retail-growing establishments) or mass market outlets (variety stores, supermarkets, department stores, and plant boutiques in shopping malls). The following figure shows the various marketing channels through which U.S. live plant production might flow to the consumer. Most potted flowering plants and vegetable, flowering, and foliar bedding plants are sold by growers directly to retail and mass-market outlets. Ornamental nursery plant growers sell most of their production through retail and landscaping outlets. Sales to other growers are also important and may account for 20 percent of a wholesale nursery's sales. About 20 percent of the green foliage plants are sold through distributors, generally located near consuming areas, which supply the various types of retail and mass-market outlets.

Figure--Principal distribution channels for marketing live plants in the United States.



Source: U.S. International Trade Commission.

Prices for live plants are determined, for the most part, by marketing conditions. In general, the largest firms will publish a price list at the beginning of each year. These published prices will take into account the market conditions and the firm's cost of production for each type of live plant sold. Since the largest firms account for a significant portion of the production for most types of plants, and because smaller firms lack the resources to analyze market conditions, the smaller firms generally adjust their prices on the basis of the published price lists of the larger firms.

U.S. Exports

Export levels and trends

The value of U.S. exports of live plants increased steadily from $7 million in 1973 to $18 million in 1977, or an increase of more than 150 percent (table 8). Exports of nursery stock accounted for over 80 percent of the increase. Exports of live plants are less than imports and small relative to domestic production.

During 1973-77 the bulk of U.S. exports of live plants went to the Canadian market. The Canadian market's share of U.S. exports ranged from a low of 52 percent in 1973 to a high of 91 percent in 1976. Other important foreign markets were Mexico, Colombia, and Libya, which together accounted for about 10 percent of U.S. live plant exports. In some years, Japan was also an important market. In the future, Arab countries are expected to be important markets for live plants as they undertake more development projects and begin to use western landscaping practices.

In 1977, more than 70 percent of U.S. exports of live plants consisted of nursery stock n.e.s. (excluding rose stocks, rose plants, herbaceous perennials, and fruit trees and fruit tree stocks) (table 8). Canada accounted for over 70 percent of U.S exports in that year.

The foreign market

In recent years, U.S. exports of live plants have faced increased competition from developing countries such as Guatemala and Costa Rica, and from developed countries such as the Netherlands and Japan. The developing countries compete with the United States on price, while the developed countries compete on the basis of quality and on the genetic makeup of the plant material.

U.S. producers supply about 85 percent of the live plants imported into Canada. The United States has been able to remain competitive in the important Canadian market owing to the transportation-cost advantage over more distant suppliers.

BEST DOCUMENT AVAILABLE

The United States is also known as a source of high-quality live plants. Phytosanitary requirements, import permits, and licensing requirements in almost all foreign countries hinder U.S. exports to some degree, but, in general, they are of minor importance. Most U.S. shippers of live plants are individual growers or grower-shippers who sell directly to wholesalers or retail buyers in the foreign markets.

U.S. Imports

Import levels and trends

Annual U.S. imports of live plants increased steadily during 1973-77, reaching a peak of 186 million pieces, valued at $21 million in 1977 (table 9). During 1973-77, approximately 89 percent of the imports were entered under TSUS item 125.80, and consisted almost entirely of cuttings (rooted and unrooted) of foliage plants. Herbaceous perennials (TSUSA item 125.3090), the next most important group of imported live plants, accounted for nearly 10 percent of U.S. imports during the same period. Imports in the other TSUS items covered by this summary are small compared with those in the above two TSUS items, generally less than $600,000 annually in the aggregate.

The largest growth in imports of live plants has occurred in the category "live plants, n.s.p.f.," imports of which increased steadily from less than 44 million pieces in 1973, valued at $3 million, to almost 172 million pieces in 1977, valued at $17 million (table 10). The rapid growth in imports of this type of plant material was a result of the vast increase in foliage plant production in the United States during the early and mid-1970's. This increase in production brought about a similar increase in the demand for cuttings. Offshore locations were selected as sources of such plant material on the premise that labor costs were lower, productivity was higher, and the climate was suitable for year-round production. Also, U.S. growers, in their haste to meet consumer demand in the early 1970's, sold most of their stockplants (stockplants are those plants from which cuttings are taken) to the retail market. Many growers, believing that the increased demand for foliage plants was going to be a short-lived phenomenon, sold their stockplants to meet consumer demand. Many of these growers had to turn to imports to obtain cuttings for their needs when the demand for foliage plants remained strong.

Imports of herbaceous perennials decreased slightly, in terms of quantity, during 1973-77, from an estimated 13.1 million pieces, valued at $2.4 million in 1973, to 12.8 million pieces, valued at $4.2 million in 1977 (table 9). During the period, imports of herbaceous perennials peaked at 13.5 million pieces in 1974 and then steadily declined to their low of 9.7 million pieces in 1976. Most of the imported material is believed to be grass sod and cuttings of geraniums and chrysanthemums.

Imports of other plant material covered by this summary are shown in tables 11-16. Imports of fruit-tree stocks and fruit plants generally account

for the majority of the imports of other plant material. Imports of fruit-tree stocks and fruit plants fluctuated widely during 1973-77, ranging from a low of 368,000 pieces in 1975 to a high of 2.7 million pieces in 1976, and annually averaged over 1.1 million pieces during 1973-77.

Leading suppliers of U.S. imports

Live plants, n.s.p.f.--In 1977 the leading suppliers of U.S. imports of live plants, n.s.p.f., were Guatemala, Jamaica, Honduras, Costa Rica, and the Netherlands. Although approximately 50 other countries exported live plants, n.s.p.f., to the United States in 1977, these 5 sources supplied 75 percent of the total, in terms of value.

Table 10 shows the import shares for the five major supplying countries for the years 1973-77. Guatemala and Jamaica supplied over 45 percent of U.S. imports in 1977, compared with 20 percent in 1973. Jamaica, which accounted for almost all of the increase, started production of foliage plant cuttings in 1974 and accounted for only 0.2 percent of imports in that year; in 1977, it supplied almost 21 percent of the imports. Tax advantages to producers, a favorable climate, and close proximity to the United States account for the rapid expansion. Honduras' market share declined from over 40 percent in 1973 to 13 percent in 1977, primarily because growers in that country did not expand production as fast as other areas and because one of the principal producers switched its sales efforts to the European market in recent years.

Other live plants.--Except for orchid plants, which are supplied predominantly by countries in the Far East and India (table 16), Canada is generally the principal U.S. supplier of other imported live plants (those not covered by TSUS item 125.80). Canada's dominant position is, in part, due to U.S. quarantine regulations which prohibit imported plant material with soil attached from all countries except Canada. Border trade between the United States and Canada also accounts for Canada's dominant position.

Import impact

U.S. imports of live plants were equivalent to less than 2 percent of the average annual domestic production during 1973-77. Most of the imported live plants are rooted and unrooted cuttings for use by U.S. growers as raw materials in their own growing operations. Much of the imported material cannot be economically produced in the United States and tends to supplement U.S. production rather than compete with it. The U.S. rates of duty on imports (equivalent to 4.4 percent ad valorem for most of the imports of live plants) have little significance on the price of the plants in the U.S. market.

BEST DOCUMENT AVAILABLE

Importers

Importers of live plants are mostly U.S. nursery and greenhouse growers which import the material for use in their own growing operations. Over 50 percent of U.S. imports were between related parties in 1977. Most of these importers are located in Florida, and in 1977, more than 75 percent of U.S. imports of live plants entered through the Miami Plant Inspection Station of the APHIS.

World Trade

Live plants are commonly produced for local consumption in most of the countries throughout the world, but information regarding world production is only indicative at best. Prior to the 1970's most international movement of live plants was border trade. With the advent of well coordinated air and ground transportation capable of handling large quantities of plants and the accompanying improvements in refrigeration, along with improved distribution facilities, the amounts and kinds of live plants entering world trade have expanded greatly.

Many of the developing countries such as Belize, Colombia, Costa Rica, the Dominican Republic, Guatemala, Honduras, Jamaica, and Kenya have taken advantage of these new developments and are producing live plants, primarily green foliage plant cuttings, for major consuming areas--Canada, Japan, the United States, and Western Europe. Producers in developing countries generally have several advantages over producers in developed countries, such as abundant, low-cost labor, climates that are conducive to year-round production, and lower building costs for growing facilities because of favorable climatic conditions.

The international movement of most live plant material is restricted, or, in some cases, prohibited by most countries to prevent the introduction and spread of injurious plant pests.

Appendix A

Excerpts from the Tariff Schedules of the United States Annotated (1978)

SS P	Item	Stat. Suf-fix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
			PART 6. - LIVE PLANTS; SEEDS			
			Part 6 headnote:			
			1. This part does not cover all live plants and seed. Cereal grains, certain bulbs and other vegetables (such as potatoes, onions, garlic and beans), and certain seeds (such as spice seeds and oil-bearing seeds) are provided for elsewhere in this schedule (see parts 7, 8, 11, 14 and 15). See part 3 of schedule 8 for importations of the Department of Agriculture and the U.S. Botanic Garden.			
			Subpart A. - Live Plants			
			Bulbs, roots, rootstocks, clumps, crowns, tubers, and herbaceous perennials:			
A	135.01	00	Tulip bulbs	No.	21.4¢ per 100	2¢ per 100
	135.05	00	Hyacinth bulbs	No.	6¢ per 100	1¢ per 100
A	135.10	00	Lily bulbs	No.	6¢ per 100	1¢ per 100
A	135.13	00	Narcissus bulbs	No.	6¢ per 100	1¢ per 100
A	135.20	00	Crocus corms	No.	21.1¢ per 100	2¢ per 100
	135.23	00	Lily of the valley pips	No.	30¢ per 100	2¢ per 100
A	135.30		Other, imported for horticultural purposes		1.3¢ ad val.	20¢ ad val.
		20	Iris bulbs	No.		
		40	Gladiolus corms	No.		
		60	Begonia (tuberous) tubers	lb.		
		70	Other bulbs, roots, rootstocks, clumps, corms, or tubers	No.		
		90	Other	No.		
	135.40	00	Seedlings, layers, and cuttings of apple, cherry, pear, plum, quince, and other fruit-tree stocks	No.	Free	2¢ per 100
A	135.50	00	Grafted or budded fruit trees, cuttings and seedlings of grape, currant, gooseberry, or other fruit plants (except trees)	No.	2¢ ad val.	20¢ ad val.
	135.51		Pineapple slips produced in Cuba		Free (a)	
	135.60	00	Seedlings and cuttings of Eleagnus, multiflora, briar, rugosa, and other rose stock	No.	13¢ per 100	2¢ per 100
	135.65	00	Rose plants, budded, grafted, or grown on their own roots	No.	1¢ each	4¢ each
	135.67	00	Seed potato eyes	lb.	2¢ ad val.	20¢ ad val.
A	135.70	00	Orchid plants	No.	4¢ ad val.	20¢ ad val.
A	135.80	00	Live plants suitable for planting, not specially provided for	No.	7.2¢ ad val.	35¢ ad val.

(a) = Suspended. See general headnote 3(b).

Note: For explanation of the symbol "A" or "A*" in the column entitled "SS", see general headnote 3(c).

BEST DOCUMENT AVAILABLE

Appendix B

Statistical Tables

Table 1.--Live plants: U.S. rates of duty, by TSUS(A) items, Aug. 31, 1963, to present

TSUS(A) item No.	Description	Authorization and effective date of rate change	Rate of duty	
			Col. 1	Col. 2
	Bulbs, roots, rootstocks, clumps, corms, tubers, and herbaceous perennials:			
	Other imported for horticultural purposes:			
1/ 125.3090	Other	Adoption of TSUS; Aug. 31, 1963.	5.5% ad val.	30% ad val.
125.40	Seedlings, layers, and cuttings of apple, cherry, pear, plum, quince, and other fruittree stocks.	Adoption of TSUS; Aug. 31, 1963.	$2 per 1,000	$2 per 1,000
		Pres. Proc. 3822 (Kennedy round); Jan. 1--		
		1968	$1.60 per 1,000	-
		1969	$1.20 per 1,000	-
		1970	80¢ per 1,000	-
		1971	40¢ per 1,000	-
		1972	Free	-
125.50	Grafted or budded fruit trees, cuttings, and seedlings of grape, currant, gooseberry, or other fruit plants (except trees).	Adoption of TSUS; Aug. 31, 1963.	10% ad val.	25% ad val.
		Pres. Proc. 3822 (Kennedy round); Jan. 1--		
		1968	9% ad val.	-
		1969	8% ad val.	-
		1970	7% ad val.	-
		1971	6% ad val.	-
		1972	5% ad val.	-
125.51	Pineapple slips produced in Cuba	Adoption of TSUS; Aug. 31, 1963.	Free 2/	-
125.60	Seedlings and cuttings of Manetti, multiflora, brier, rugosa, and other rose stock.	Adoption of TSUS; Aug. 31, 1963.	20¢ per 1,000	$2 per 1,000
		Pres. Proc. 3822 (Kennedy round); Jan. 1--		
		1968	19¢ per 1,000	-
		1969	18¢ per 1,000	-
		1970	17¢ per 1,000	-
		1971	16¢ per 1,000	-
		1972	15¢ per 1,000	-

See footnotes at end of table.

BEST DOCUMENT AVAILABLE

Table 1.--Live plants: U.S. rates of duty, by TSUS(A) items, Aug. 31, 1963, to present--Continued

TSUS(A) item No.	Description	Authorization and effective date of rate change	Rate of duty	
			Col. 1	Col. 2
125.65	Rose plants, budded, grafted, or grown on their own roots.	Adoption of TSUS; Aug. 31, 1963.--Pres. Proc. 3822 (Kennedy round); Jan. 1--	2¢ each	4¢ each
		1968	1.8¢ each	-
		1969	1.5¢ each	-
		1970	1.4¢ each	-
		1971	1¢ each	-
		1972	1¢ each	-
125.67	Seed potato eyes	Adoption of TSUS; Aug. 31, 1963.--Pres. Proc. 3822 (Kennedy round); Jan. 1--	10% ad val.	20% ad val.
		1968	9% ad val.	-
		1969	8% ad val.	-
		1970	7% ad val.	-
		1971	6% ad val.	-
		1972	5% ad val.	-
125.70	Orchid plants	Adoption of TSUS; Aug. 31, 1963.--Pres. Proc. 3822 (Kennedy round); Jan. 1--	5.5% ad val.	25% ad val.
		1968	5% ad val.	-
		1969	4.5% ad val.	-
		1970	4.5% ad val.	-
		1971	4% ad val.	-
		1972	4% ad val.	-
125.80	Live plants, suitable for planting, not specially provided for.	Adoption of TSUS; Aug. 31, 1963.--Pres. Proc. 3822 (Kennedy round); Jan. 1--	10% ad val.	25% ad val.
		1968	9% ad val.	-
		1969	9% ad val.	-
		1970	8% ad val.	-
		1971	8% ad val.	-
		1972	7.5% ad val.	-

1/ TSUS Item 125.3090 established Jan. 1, 1978; transferred from TSUS item 125.3080(pt.).

2/ Suspended.

Table 2.—Live plants: Value of U.S. production, imports, exports, and apparent consumption, 1973-77

Year	Production	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Production	consumption
	Million dollars	Million dollars	Million dollars	Million dollars	Percent	Percent
1973	1,082	6	7	1,081	0.6	0.6
1974	1,289	10	9	1,290	.8	.8
1975	1,392	14	11	1,395	1.0	1.0
1976	1,666	19	14	1,671	1.1	1.1
1977	1,863	21	18	1,866	1.1	1.1

Source: Production estimated by the U.S. International Trade Commission; imports compiled from official statistics of the U.S. Department of Commerce except for TSUSA item 125.3090, which was estimated by the U.S. International Trade Commission, and exports compiled from official statistics of the U.S. Department of Commerce.

Table 3.--Live plants: U.S. producers, producers' sales, and percentage distribution of producers and their sales, by types and by major producing States, 1977

Type and State	Producers	Producers' sales	Producers	Producers' sales
	Number	1,000 dollars	Percent	Percent
Potted chrysanthemums:				
California	37	10,062	2.7	18.2
Florida	21	7,243	1.5	13.1
Texas	45	6,723	3.3	12.2
All other	1,278	31,277	92.5	56.5
Total	1,381	55,305	100.0	100.0
Potted poinsettias:				
California	53	6,351	2.7	13.4
Ohio	222	4,164	11.2	8.8
Texas	67	3,815	3.4	8.1
All other	1,635	33,009	82.7	69.7
Total	1,977	47,339	100.0	100.0
Bedding plants --vegetable types:				
California	36	5,787	1.5	18.4
Michigan	303	3,881	12.4	12.3
Ohio	298	3,457	12.2	10.9
All other	1,798	18,408	73.9	58.4
Total	2,435	31,533	100.0	100.0
Foliage plants:				
Florida	378	119,956	20.6	44.1
California	230	70,091	12.5	25.8
Texas	93	17,830	5.1	6.6
All other	1,135	63,882	61.8	23.5
Total	1,836	271,759	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table 4.--Live plants: U.S. wholesale value of production, by specified categories, 1973-77

(In millions of dollars)

Category	1973	1974	1975	1976	1977
Herbaceous perennials	117	155	163	224	241
Fruit trees and fruit plants	94	109	96	96	112
Rose stocks and plants	17	22	25	33	24
Seed potato pieces	1/	1/	1/	1/	1/
Orchid plants	11	12	13	14	15
Other live plants	843	991	1,095	1,299	1,471
Total	1,082	1,289	1,392	1,666	1,863

1/ Not available.

Source: Estimated by the U.S. International Trade Commission from official statistics of the U.S. Department of Agriculture, official statistics of the Nursery and Seed Service, California Department of Agriculture, and from trade sources.

Table 5.--Foilage plants: Sales, by selected States, 1973-77

State	1973	1974	1975	1976	1977	Average
	Value (1,000 dollars)					
Florida	33,807	48,482	87,312	110,656	119,956	80,043
California	12,884	30,552	45,732	61,359	70,091	44,124
Texas	3,112	4,413	6,144	17,625	17,830	9,825
Ohio	2,326	3,920	6,989	13,818	11,476	7,706
Michigan	2,895	3,055	4,433	4,406	7,122	4,382
All other	1/ 12,958	2/ 23,081	3/ 34,288	3/ 35,563	4/ 45,284	30,235
Total	67,982	113,503	184,898	243,427	271,759	176,314
	Percent of total					
Florida	49.7	42.7	47.2	45.5	44.1	45.4
California	19.0	20.9	24.7	25.2	25.8	25.0
Texas	4.6	3.9	3.3	7.2	6.6	5.6
Ohio	3.4	3.5	3.8	5.7	4.2	4.4
Michigan	4.3	2.7	2.4	1.8	2.6	2.5
All other	19.1	20.3	18.5	14.6	16.7	17.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ All other includes Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Maryland, Massachusetts, Minnesota, Missouri, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Tennessee, Washington, and Wisconsin.

2/ All other includes Colorado, Connecticut, Illinois, Indiana, Iowa, Maryland, Massachusetts, Minnesota, Missouri, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Tennessee, Washington, and Wisconsin.

3/ All other includes Colorado, Illinois, Maryland, Massachusetts, Minnesota, New York, Oregon, and Pennsylvania.

4/ All other includes Colorado, Georgia, Hawaii, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, New York, Oregon, and Pennsylvania.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Note.--Because of rounding, figures may not add to the totals shown.

Table 6.--Potted chrysanthemums: Sales, by selected States, 1973-77

State	1973	1974	1975	1976	1977	Average
	Value (1,000 dollars)					
California	6,163	7,827	8,545	11,150	10,062	8,749
Florida	2,901	4,409	5,325	7,569	7,243	5,489
Texas	3,179	3,432	3,862	6,324	6,723	4,704
Ohio	2,358	2,789	3,360	4,777	4,412	3,539
Michigan	1,466	1,651	1,665	3,263	3,025	2,214
All other	1/ 18,029	2/ 18,564	3/ 19,480	3/ 21,693	3/ 23,840	20,321
Total	34,096	38,672	42,327	54,776	55,305	45,017
	Percent of total					
California	18.1	20.2	20.2	20.4	18.2	19.4
Florida	8.5	11.4	12.6	13.8	13.1	12.2
Texas	9.3	8.9	9.1	11.5	12.2	10.4
Ohio	6.9	7.2	8.0	8.7	8.0	7.5
Michigan	4.3	4.3	3.9	6.0	5.5	4.5
All other	52.9	48.0	46.2	39.6	43.1	45.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ All other includes Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Maryland, Massachusetts, Minnesota, Missouri, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Tennessee, Washington, and Wisconsin.
2/ All other includes Colorado, Connecticut, Illinois, Indiana, Iowa, Maryland, Massachusetts, Minnesota, Missouri, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Tennessee, Washington, and Wisconsin.
3/ All other includes Colorado, Connecticut, Illinois, Indiana, Iowa, Maryland, Massachusetts, Minnesota, Missouri, New Jersey, New York, North Carolina, Pennsylvania, Tennessee, Washington, and Wisconsin.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Note.--Because of rounding, figures may not add to the totals shown.

Table 7.--Potted geraniums, hydrangeas, lilies, poinsettias, flowering and foliar bedding plants and vegetable bedding plants: U.S. growers' sales, 1976 1/ and 1977

(In thousands of dollars)

Year	Potted geraniums	Potted hydrangeas	Potted lilies	Potted poinsettias	Flowering and foliar bedding plants	Vegetable bedding plants
1976	32,096	5,561	14,246	37,595	63,878	30,216
1977	30,816	5,604	16,718	47,339	81,560	31,533

1/ Data are not available for earlier years.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table 8.--Live plants: U.S. exports of domestic merchandise, by selected markets, 1973-77

(In thousands of dollars)

Market	1973	1974	1975	1976	1977	Average
	Herbaceous plants (including fruit plants) and fruit trees and fruit tree stocks					
Canada	735	503	1,166	1,203	1,441	1,010
Mexico	590	855	990	851	522	762
France	1/	1/	1/	1/	176	2/
Costa Rica	1/	13	1/	1/	144	2/
All other	512	750	748	929	817	2/
Total	1,837	2,121	2,904	2,983	3,100	2,589
	Rose plants and rose stocks					
Canada	1,153	1,392	1,492	1,078	1,384	1,300
Colombia	29	1/	1/	555	91	2/
Netherlands	1/	1/	1/	1/	64	2/
All other	42	48	143	362	240	2/
Total	1,224	1,440	1,635	1,995	1,779	1,615
	Nursery stock, n.e.s.					
Canada	1,867	3,846	4,478	6,737	9,209	5,155
Colombia	693	61	1/	1/	520	2/
Libya	1/	1/	1/	1/	491	2/
West Germany	156	182	236	280	345	240
Japan	292	193	251	316	313	273
Venezuela	55	61	116	1/	307	2/
All other	1,162	1,133	1,071	1,538	1,669	2/
Total	4,225	5,116	6,152	8,871	12,854	7,444
	All live plants					
Canada	3,755	5,381	7,136	9,018	12,034	7,465
All other	3,531	3,296	3,555	4,831	5,699	4,182
Total	7,286	8,677	10,691	13,849	17,733	11,647

1/ Not separately reported; included in "all other."
2/ No meaningful average.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to the totals shown.

Table 9.--Live plants: U.S. imports for consumption, by TSUS or TSUSA items, 1/ 1973-77

Item	1973	1974	1975	1976	1977	Average
	Quantity (1,000 pieces)					
125.3090	2/ 13,118	2/ 13,523	2/ 12,531	2/ 9,747	2/ 12,787	12,341
125.40	235	230	265	514	549	359
125.50	342	819	103	2,172	483	784
125.60	25	45	22	8	15	23
125.65	418	352	78	46	151	209
125.70	103	171	415	281	375	269
125.80	43,770	75,253	122,250	160,509	171,669	114,690
Total	58,011	90,393	135,664	173,277	186,029	128,675
	Value (1,000 dollars)					
125.3090	2/ 2,400	2/ 3,000	2/ 3,500	2/ 3,400	2/ 4,200	3,300
125.40	52	62	60	83	126	77
125.50	63	87	74	165	73	92
125.60	1	3	3	2	2	2
125.65	473	414	132	18	89	225
125.70	94	123	291	216	297	204
125.80	2,852	6,599	9,835	15,484	16,699	10,294
Total	5,935	10,288	13,895	19,368	21,486	14,194
	Percent of total quantity					
125.3090	22.6	15.0	9.2	5.6	6.9	9.6
125.80	75.5	83.3	90.1	92.6	92.3	89.1
All other	1.9	1.7	.7	1.8	.8	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ Does not include imports of seed potato eyes (TSUS item 125.67) imports of which are very erratic. In 1974, 232,000 pounds of seed-potato eyes, valued at $14,000, were imported, and in 1977, 50,000 pounds, valued at $3,000, were imported.

2/ Estimated by the U.S. International Trade Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 10.--Live plants, n.s.p.f. (TSUS item 125.80): U.S. imports for consumption, by specified sources, 1973-77

Source	1973	1974	1975	1976	1977	Average
	Quantity (1,000 pieces)					
Guatemala	8,452	26,371	31,008	44,937	42,716	30,697
Jamaica	0	130	24,639	31,150	35,593	18,302
Honduras	18,182	22,488	26,168	27,661	22,906	23,481
Costa Rica	137	2,555	6,178	8,956	16,730	6,911
Netherlands	1,030	4,036	7,290	13,676	11,215	7,449
All other	15,969	19,673	26,967	34,129	42,509	27,850
Total	43,770	75,253	122,250	160,509	171,669	114,690
	Value (1,000 dollars)					
Guatemala	413	1,225	1,939	2,522	2,419	1,704
Jamaica	-	4	301	688	759	350
Honduras	169	1,098	1,146	1,454	1,403	1,054
Costa Rica	23	137	324	676	1,834	599
Netherlands	339	869	1,563	3,265	2,750	1,757
All other	1,908	3,266	4,562	6,879	7,534	4,830
Total	2,852	6,599	9,835	15,484	16,699	10,294
	Percent of total quantity					
Guatemala	19.3	35.0	25.4	28.0	24.9	26.8
Jamaica	0	.2	20.2	19.4	20.7	16.0
Honduras	41.5	29.9	21.4	17.2	13.3	20.5
Costa Rica	.3	3.4	5.0	5.6	9.7	6.0
Netherlands	2.4	5.4	6.0	8.5	6.5	6.9
All other	36.5	26.1	22.0	21.3	24.9	24.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to the totals shown.

Table 11.--Fruit tree seedlings, layers, and cuttings (TSUS item 125.40): U.S. imports for consumption, by principal sources, 1973-77

Source	1973	1974	1975	1976	1977	Average
	Quantity (pieces)					
Canada	183,334	116,260	142,568	314,179	232,185	197,705
Netherlands	26,710	29,650	57,200	49,000	221,250	76,762
West Germany	25,000	28,000	45,800	27,575	93,225	43,920
U. Kingdom	0	900	2,100	1,600	2,500	1,420
All other	0	55,000	17,050	121,250	0	38,660
Total	235,044	229,810	264,718	513,604	549,160	358,467
	Value					
Canada	$45,446	$37,942	$35,238	$57,804	$54,246	$46,135
Netherlands	4,000	6,103	11,219	10,857	45,170	15,470
West Germany	3,035	4,488	9,205	11,068	25,054	10,570
U. Kingdom	-	415	1,154	1,060	1,400	806
All other	-	12,743	2,919	2,174	-	3,567
Total	52,481	61,691	59,735	82,963	125,870	76,548
	Percent of total quantity					
Canada	78.0	50.6	53.9	61.2	42.3	55.2
Netherlands	11.4	12.9	21.6	9.5	40.3	21.4
West Germany	10.6	12.2	17.3	5.4	17.0	12.3
U. Kingdom	-	.4	.8	.3	.5	.4
All other	-	23.9	6.4	23.6	-	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to the totals shown.

Table 12.--Fruit trees, grafted or budded, and cuttings and seedlings of fruit plants (TSUS item 125.50): U.S. imports for consumption, by principal sources, 1973-77

Source	1973	1974	1975	1976	1977	Average
	Quantity (pieces)					
Netherlands	0	0	0	0	300,000	60,000
Canada	321,574	793,667	93,346	2,121,824	170,337	700,750
Guatemala	0	0	0	0	11,350	2,270
Belgium	0	0	0	14,000	1,000	3,000
New Zealand	1,800	0	3,370	34,314	200	7,937
All other	18,420	25,000	3,366	1,850	72	9,741
Total	341,794	818,667	103,082	2,171,988	482,959	783,698
	Value					
Netherlands	-	-	-	-	$19,256	$3,851
Canada	$55,829	$72,578	$68,189	$140,477	49,173	77,249
Guatemala	-	-	-	-	3,431	686
Belgium	-	-	-	3,260	546	761
New Zealand	3,695	-	5,189	19,571	387	5,768
All other	3,291	14,250	505	1,365	256	3,931
Total	62,815	86,828	73,883	164,673	73,049	92,250
	Percent of total quantity					
Netherlands	-	-	-	-	62.1	7.7
Canada	94.1	96.7	93.5	97.7	35.3	89.4
Guatemala	-	-	-	-	2.4	.3
Belgium	-	-	-	.6	.2	.4
New Zealand	.5	-	3.3	1.6	1/	1.0
All other	5.4	3.3	3.3	1/	1/	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ Less than 0.05 percent.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to the totals shown.

Table 13.--Seedlings and cuttings of rose stock (TSUS item 125.60): U.S. imports for consumption, by principal sources, 1973-77

Source	1973	1974	1975	1976	1977	Average
	Quantity (pieces)					
Canada	0	3,000	16,600	3,966	9,500	6,613
Guatemala	0	0	0	0	4,500	900
Jamaica	0	0	0	0	1,200	240
All other	25,000	41,750	5,250	3,700	0	15,140
Total	25,000	44,750	21,850	7,666	15,200	22,893
	Value					
Canada	-	$824	$1,676	$924	$691	$823
Guatemala	-	-	-	-	1,125	225
Jamaica	-	-	-	-	400	80
All other	$1,050	2,204	1,252	1,437	-	1,189
Total	1,050	3,028	2,928	2,361	2,216	2,317

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 14.--Rose plants, budded, grafted, or grown on their own roots (TSUS item 125.65): U.S. imports for consumption, by principal sources, 1973-77

Source	1973	1974	1975	1976	1977	Average
	Quantity					
Canada	417,738	351,817	77,075	33,989	90,550	194,234
France	0	0	0	10,000	60,000	14,000
Netherlands	0	0	0	2,300	600	580
All other	0	0	750	0	0	150
Total	417,738	351,817	77,825	46,289	151,150	208,964
	Value					
Canada	$473,154	$414,354	$131,668	$15,582	$87,535	$224,459
France	-	-	-	407	1,390	359
Netherlands	-	-	-	1,982	315	459
All other	-	-	750	-	-	150
Total	473,154	414,354	132,418	17,971	89,240	225,427

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 15.--Seed-potato eyes (TSUS item 125.67): U.S. imports for consumption, by principal sources, 1973-77

Source	1973	1974	1975	1976	1977
	Quantity (pounds)				
Canada	0	231,630	0	0	50,000
All other	0	0	0	0	0
Total	0	231,630	0	0	50,000
	Value				
Canada	-	$14,213	-	-	$2,500
All other	-	-	-	-	-
Total	-	14,213	-	-	2,500

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 16.--Orchid plants (TSUS item 125.70): U.S. imports for consumption, by principal sources, 1973-77

Source	1973	1974	1975	1976	1977	Average
	Quantity					
Republic of China	3,250	0	13,862	2,000	99,692	23,761
India	19,796	26,001	35,645	80,586	67,449	45,895
Thailand	14,351	4,232	42,277	55,796	43,647	32,061
Brazil	8,108	17,199	20,218	18,816	29,807	18,830
Japan	16,221	49,861	97,405	29,449	21,453	42,878
All other	40,892	73,715	205,472	94,263	112,767	105,475
Total	102,618	171,008	415,149	280,910	374,815	268,900
	Value					
Republic of China	$5,919	-	$88,710	$3,896	$28,538	$25,413
India	6,052	$9,653	14,854	22,522	27,058	16,028
Thailand	13,469	5,123	23,951	44,119	62,174	29,767
Brazil	12,379	24,797	32,953	37,723	43,272	30,225
Japan	16,267	21,258	24,776	13,745	11,345	17,498
All other	39,831	62,518	105,676	94,306	124,743	85,414
Total	93,917	123,449	290,920	216,311	297,130	204,345
	Percent of total quantity					
Republic of China	3.2	-	3.3	0.7	26.6	8.9
India	19.3	15.2	8.6	28.7	18.0	17.1
Thailand	14.0	2.5	10.2	19.9	11.6	11.9
Brazil	7.9	10.1	4.9	6.7	8.0	7.0
Japan	15.8	29.2	23.5	10.5	5.7	15.9
All other	39.8	43.0	49.5	33.5	30.1	39.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce.

SUMMARIES OF TRADE AND TARIFF INFORMATION

USITC Publication 841

Complete list of Summaries published to date in Schedule 1

Control No.	Title	Control No.	Title
1-15-1	Fresh Cut Flowers and Articles Made From Such Flowers or Other Plant Parts		
1-11-2	Coffee		
1-14-3	Soybeans and Soybean Products		

Library Cataloging Data

U.S. International Trade Commission.
Summary of trade and tariff information, prepared in terms of the Tariff schedules of the United States: live plants, TSUSA item 125.3090; TSUS items 125.40, 125.50, 125.51, 125.60, 125.65, 125.67, 125.70, and 125.80. Washington, 1978.

37 p. illus. 27 cm. (USTIC Publication 841)

1. Flowers. 2. Forage plants. 3. Seedlings. I. Title.